WHAT IS CLAIMED IS:

1. An isolated Bolekine polypeptide comprising amino acid residues 1 to 111 of Figure 2 (SEQ ID NO:2) capable of (i) enhancing the proliferation of immune cells or (ii) increasing infiltration of immune cells into a tissue in order to alleviate infection.

5

2. An isolated Bolekine polypeptide which is encoded by the cDNA insert of the vector deposited with the ATCC on October 31, 1997 as ATCC Deposit No. 209424 (DNA39523-1192).

10

3. An isolated Bolekine polypeptide comprising amino acid residues 34 to 111 of Figure 2 (SEQ ID NO:2) capable of (i) enhancing the proliferation of immune cells, or (ii) increasing infiltration of immune cells into a tissue in order to alleviate infection.

15

4. An isolated Bolekine polypeptide consisting of the sequence of amino acids from 1 to 111 of Figure 2 (SEQ ID NO:2), or a fragment thereof, wherein said fragment is capable of enhancing the proliferation of immune cells or (ii) increasing infiltration of immune cells into a tissue in order to alleviate infection.

5. A chimeric molecule comprising the Bolekine polypeptide as in Claim 1, fused to a heterologous amino acid sequence.

20

6. The chimeric molecule of Claim 5, wherein said heterologous amino acid sequence is an epitope tag sequence.

7. A composition of matter comprising the Bolekine polypeptide as in Claim 1, in admixture with a pharmaceutically acceptable carrier.

25

8 The composition of matter of Claim 7 comprising a therapeutically effective amount of the Bolekine polypeptide.

a composition of matter comprising a Bolekine polypeptide of Claim 1, contained within said container,

9. An article of manufacture, comprising:

30

a label on said container; and

a container;

wherein label on said container indicates that said composition of matter can be used for treating an immune related disorder.

35

10. An agonist of Bolekine polypeptide capable of alleviating the immune related disorders of: psoriasis, inflammatory bowel disease, renal disease, arthritis, immune mediated alopecia, stroke, encephalitis or hepatitis in a mammal.